

predetermined information units of the information as a data payload, and

carrying out the asynchronous transmission by wireless packet obtained by combining the monopayload packet with the multipayload packet depending on a length of the information to be asynchronously transmitted by wireless.

A² --2. (Amended) The wireless transmitting method according to claim 1, further comprising the step of adding a predetermined preamble to form a wireless packet to each packet of the monopayload packet to form a wireless packet or to the multipayload packet to form a wireless packet.

--3. (Amended) The wireless transmitting method according to claim 1, further comprising the steps of adding common header information to the monopayload packet and the multipayload packet and decoding the header information to make a state of succeeding data payload packets decidable by a communicating station of destination.

--4. (Amended) The wireless transmitting method according to claim 1, further comprising the step of describing a number of predetermined information units included in the multipayload packet as common header information in the multipayload packet so that the number of continuous information units is specified.

--5. (Amended) The wireless transmitting method according to claim 1, further comprising the step of adding a sequence number to the monopayload packet and obtaining the multipayload packet by adding the number for each increase in the information unit included in the packet.

A² --6. (Amended) The wireless transmitting method according to claim 1, further comprising the steps of adding an error detection code or an error correction code to the monopayload packet and the multipayload packet by said information unit for transmission, whereby retransmission is required for each information unit having an error.

--7. (Amended) A wireless transmitting method for carrying out information transmission between a plurality of communication stations, the method comprising the steps of

carrying out wireless transmission control by an access control signal sent from a control station, and

transmitting said access control signal utilizing a wireless packet with only common header information and having no data payload portion.

--8. (Amended) The wireless transmitting method according to claim 7, further comprising the step of adding in that a predetermined preamble to each packet to form a wireless packet and

the wireless transmission is carried out utilizing the packet.

--9. (Amended) A wireless transmitter for forming a wireless network to carry out asynchronous transmission of information by using a plurality of communicating devices, the transmitter comprising

A² dividing means for dividing asynchronous information to be transmitted by wireless into corresponding information units,

monopayload packet building means for building a monopayload packet having one of predetermined information units as a data payload,

multipayload packet building means for building a multipayload packet having a plurality of predetermined information units as a data payload,

header adding means for adding header information describing a type of payload packet to the monopayload packet and to the multipayload packet, and

wireless packet building means for building a wireless packet by combining the monopayload packet with the multipayload packet depending on a length of the asynchronous information to be transmitted by wireless,

whereby the asynchronous transmission is carried out by the wireless packet.

--10. (Amended) The wireless transmitter according to claim 9,

further comprising:

preamble adding means for adding a predetermined preamble to the monpayload packet and multipayload packet, and

access control means for carrying out wireless transmission control using the preamble information by an access control signal sent from a control station,

whereby the wireless packet is transmitted by wireless using the access control means.

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11. (Amended) The wireless transmitter according to claim 9, further comprising

receiving means for receiving an access control signal sent from a control device of the wireless network,

access control signal decoding means for decoding the access control signal, and

deciding means for deciding that the relevant access control signal is for its own station,

whereby the wireless transmission of the wireless packet is started using the deciding means.

--12. (Amended) A wireless transmitter for forming a wireless network to carry out asynchronous transmission of information by using a plurality of communicating devices, the transmitter comprising:

receiving means for receiving a predetermined preamble,

header decoding means for decoding header information added to the predetermined preamble,

header analyzing means for deciding whether there is succeeding payload portions after the header information and for deciding a type of payload based on the header information, and

payload decoding means for decoding the payload portion as asynchronous information.

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--13. (Amended) A wireless transmitter for forming a wireless network to carry out asynchronous transmission of information by using a plurality of communicating devices, the transmitter comprising:

header building means for building header information based on an access control signal sent from a control station for carrying out wireless transmission control by the access control signal,

access control packet building means for adding a predetermined preamble to the head information to build an access control packet, and

carrier detecting means for detecting information transmitted on a wireless transmission path,

whereby the access control packet is transmitted depending on a state of the wireless transmission path.

REMARKS